

and thereby form a pre-hybridized RNA-capture reagent complex comprising the target nucleotide sequence;

A<sup>1</sup>  
b) contacting the pre-hybridized RNA-capture reagent complex with a microarray having thereon a plurality of features each comprising a particular probe nucleotide sequence; and

cont.  
c) incubating the pre-hybridized RNA-capture reagent complex on the microarray at a second temperature to hybridize the target nucleotide sequence of the pre-hybridized RNA-capture reagent complex to the complementary probe nucleotide sequence contained within the feature, wherein the presence of such hybridization results in a detectable hybridization pattern for subsequent analysis.

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19. (Once Amended) A method for determining the presence of a specific nucleotide sequence in an RNA reagent of a target sample, said method comprising the steps of:

A<sup>2</sup>  
a) contacting a first component including an RNA reagent extracted from a target sample, said RNA reagent having a target nucleotide sequence and a capture sequence with a microarray having thereon a plurality of features each comprising a particular probe nucleotide sequence;

b) incubating the RNA reagent and the complementary probe nucleotide sequences on the microarray at a first temperature to hybridize the target nucleotide sequence of the RNA reagent to the complementary probe nucleotide sequence contained within the feature;

c) contacting a second component comprising a capture reagent comprising a label capable of emitting a detectable signal and comprising a nucleotide sequence complementary to the capture sequence of the RNA reagent of the first component; and

A2  
cont. d) incubating the capture reagent and the capture sequence of the RNA reagent at a second temperature to induce the capture sequence of the RNA reagent of the first component to hybridize to the complementary nucleotide sequence of the capture reagent of the second component, wherein the presence of the hybridization results in a detectable hybridization pattern for subsequent analysis.

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- 39. (New) The method of claim 1, wherein said probe nucleotide sequence is DNA.
  - 40. (New) The method of claim 1, wherein said probe nucleotide sequence is RNA.
  - 41. (New) The method of claim 19, wherein said probe nucleotide sequence is DNA.
  - 42. (New) The method of claim 19, wherein said probe nucleotide sequence is RNA.
  - 43. (New) The method of claim 1, wherein said second component comprises a capture reagent having at least one first arm comprising said label and at least one second arm having comprising said nucleotide sequence complementary to said capture sequence of the RNA reagent.
  - 44. (New) The method of claim 43, wherein said second component is a dendrimer.
  - 45. (New) The method of claim 19, wherein said second component comprises a capture reagent having at least one first arm comprising said label and at least one second arm having comprising said nucleotide sequence complementary to said capture sequence of the RNA reagent.
  - 46. (New) The method of claim 45, wherein said second component is a dendrimer.

47. (New) A method comprising the steps of:
- (a) using an array of probe nucleotide sequences;
  - (b) using a first component comprising RNA reagent, said RNA reagent having a target nucleotide sequence and a capture sequence;
  - (c) using a second component comprising a complement, said complement being a complementary nucleotide sequence to said capture sequence of said RNA reagent;
  - (d) contacting said RNA reagent with both said array and a second component in any order;
  - (e) wherein said RNA is contacted with said array to allow said target nucleotide sequence of said RNA reagent to bind to any of said probe nucleotide sequences on said array that comprise DNA or RNA complementary to said target nucleotide sequence;
  - (f) wherein said RNA reagent is contacted with said second component to allow said complement to bind to said capture sequence of said RNA reagent;
  - (g) and wherein said second component produces a detectable hybridization pattern on said array.

48. (New) The method of claim 47, wherein said second component comprises a dendrimer.

49. (New) The method of claim 47, wherein said second component comprises at least one molecule selected from the group consisting of dendrimers, carbohydrates, proteins, and nucleic acids.

50. (New) The method of claim 47, wherein said capture sequence comprises at least one

adenine base.

51. (New) The method of claim 47, wherein said capture sequence comprises a poly A tail.

52. (New) A composition, said composition comprising:

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- (a) an array of probe nucleotide sequences;
  - (b) said array further comprising a first component comprising RNA reagent, said RNA reagent having a target nucleotide sequence and a capture sequence, said target nucleotide sequence of said RNA reagent being bound to one of said probe nucleotide sequences on said array, wherein said target sequence of said RNA reagent is bound to a probe nucleotide sequence of DNA or RNA;
  - (c) said composition further comprising a second component, said second component comprising a complementary nucleotide sequence to said capture sequence of said RNA reagent, said complementary nucleotide sequence being bound to said capture sequence;
  - (d) and wherein said second component further comprises a label.

53. (New) The method of claim 52, wherein said second component comprises a dendrimer.

54. (New) The method of claim 52, wherein said second component comprises at least one molecule selected from the group consisting of dendrimers, carbohydrates, proteins, and nucleic acids.

55. (New) The method of claim 52, wherein said capture sequence comprises at least one adenine base.

56. (New) The method of claim 52, wherein said capture sequence comprises a poly A tail.